

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Kazuhiko KONO : Attn: BOX PCT

Serial No. NEW : Docket No. 2001\_0912A

Filed August 2, 2001 : OPTICAL DISK DEVICE

**[Corresponding to PCT/JP00/08805  
Filed December 13, 2000]**

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents,  
Washington, DC 20231

Sir:

Please amend the above-identified application as follows.

**In the Specification and Abstract:**

**Please replace the paragraph beginning at page 7, line 6, with the following  
rewritten paragraph:**

For recording signals on the first data plane S1, as shown in Fig. 10(A), the focus of the light beam follows the first data plane S1. At this moment, the light beam is also emitted to the second data plane S2, but since the first data plane S1 and second data plane S2 are located apart from each other by a distance D, the light beam does not focus sufficiently on the second data plane S2. Therefore, the quantity of light per unit area is small, and the temperature of the second data plane S2 does not rise to the recording temperature, and therefore wrong recording or wrong

erasing of signals does not occur. Similarly, as shown in Fig. 10(B), when the focus of the light beam follows the second data plane S2, the light beam does not focus sufficiently on the first data plane S1, and therefore wrong recording or wrong erasing of signal does not occur on the first data plane S1. In the case that signals are recorded on the first data plane S1 as shown in Fig. 10(A), if the focus control is disturbed by disturbance, vibration or physical defect on the disk, as shown in Fig. 10(B), the light beam may focus nearly on the second data plane S2. In this case, signal may be recorded or erased incorrectly in the second data plane S2 where the signal is not intended to record. Even if not reaching a state in Fig. 10(B), if slightly approaching from a state in Fig. 10(A) to that in Fig. 10(B), the light beam has a small spot diameter on the second data plane S2. Accordingly, the light beam has the quantity per unit area increase, the temperature of the plate rises, and thus, recorded data in the second data plane S2 may be damaged by incorrect recording or erasing. The similar operation may be performed when data is recorded in the second data plane S2. In this case, a disturbed focus control has the signal in the first data plane S1 recorded or erased incorrectly.

**In the Drawings:**

- (1) Proposed Drawing Amendments are submitted herewith under separate cover letter; and
- (2) Replacement formal drawings for Figs. 1 and 2 are submitted herewith under separate cover letter, to incorporate the Proposed Drawing Amendments thereto.

**REMARKS**

Entry of the above specification amendment prior to initial examination is respectfully requested.

Approval of the Proposed Drawing Amendments noted above, as well as the substitute formal drawings for Figs. 1 and 2, are also respectfully requested.

Respectfully submitted,

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recording data in plural layers, if the light beam following a layer moves to other layer during recording the data, the device may records or erases data incorrectly in a region where the data is not intended to be recorded. The problem will be more specifically explained with referring to Fig. 10 5 and Fig. 11.

For recording signals on the first data plane S1, as shown in Fig. 10(A), the focus of the light beam follows the first data plane S1. At this moment, the light beam is also emitted to the second data plane S2, but since the first data plane S1 and second data plane S2 are located apart 10 from each other by a distance D, the light beam does not focus sufficiently on the second data plane S2. Therefore, the quantity of light per unit area is small, and the temperature of the second data plane S2 does not rise to the recording temperature, and therefore wrong recording or wrong erasing of signals does not occur. Similarly, as shown in Fig. 10(B), when 15 the focus of the light beam follows the second data plane S2, the light beam does not focus sufficiently on the first data plane S1, and therefore wrong recording or wrong erasing of signal does not occur on the first data plane S1. In the case that signals are recorded on the first data plane S1 as shown in Fig. 10(A), if the focus control is disturbed by disturbance, 20 vibration or physical defect on the disk, as shown in Fig. 10(B), the light beam may focus nearly on the second data plane S2. In this case, signal may be recorded or erased incorrectly in the second data plane S2 where the signal is not intended to record. Even if not reaching a state in Fig. 25 10(B), if slightly approaching from a state in Fig. 10(A) to that in Fig. 10(B), the light beam has a small spot diameter on the second data plane S2. Accordingly, the light beam has the quantity per unit area increase, the temperature of the plate rises, and thus, recorded data in the second